

PALEONTOLOGY.—*Check list of salinity tolerance of post-Paleozoic fossil Ostracoda.*¹ I. G. SOHN, U.S. Geological Survey. (Communicated by J. S. Williams.)

Among microfossils Ostracoda are considered second only to Foraminifera as horizon markers. Their utilitarian value is enhanced by the fact that they occur in both fresh and salt water, whereas the Foraminifera are confined to salty waters. Although certain genera of ostracodes show remarkable tolerances to variation in salinity, none of the species belonging to those genera has to date been recorded as tolerant to both strictly fresh and strictly marine environments. Some species can live in water that grades

from fresh to brackish; others tolerate brackish to marine water. Many genera and species are reported to be confined to each one of the several types of salinity environments.

The following table records the inferred salinity tolerance of 80 forms included in 36 genera. The species are those for which salinity habitat is specifically mentioned in the literature. The table is compiled as an aid to interpreting the depositional environment of sediments containing post-Paleozoic Ostracoda. It is the result of an objective survey of the literature and consequently may include some erroneous inferences, which future investigations will rectify.

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LIST OF POST-PALEOZOIC FOSSIL OSTRACODES FOR WHICH A DEFINITE SALINITY HABITAT HAS BEEN INFERRED

Ostracode	Type of Water			Remarks	Reference
	Fresh	Brackish	Marine		
<i>Anonocythere</i>		×			21
<i>A. floridana</i>			×		21
<i>Bairdia oviformis</i>			×	Shallow warm water.	20
<i>Bythocypris</i>			×		17, 24
<i>B. simulata</i>			×	Shallow water.	6
<i>Bythocythere simplex</i>			×		19
<i>Candona ansata</i>	×	×			22
<i>C. bononiensis</i>	×				22
<i>C. forbesii</i>	×	×			11
<i>Cyprella</i>			×		4
<i>Cypridea</i>	×	×		Thin shells fresh, thick shells brackish (10).	4, 10, 15
<i>C. dunkeri</i>	×	×		Slightly saline (1).	1, 22
<i>C. granulosa</i>		×			1
<i>C. granulosa</i> var. <i>fasciculata</i>		×		More saline than next below.	1
<i>C. granulosa</i> var. <i>paucigranulata</i>		×		Less saline than above.	1
<i>C. primaeva</i>	×				22
<i>C. punctata</i>	×	×		Slightly saline (1); fresh water (22).	1, 22
<i>Cyprideis</i>		×			15
<i>Cypridopsis compressa</i>	×				8
<i>Cyprione bristovii</i>	×				1
<i>Cypris purbeckensis</i>	×				22
<i>C. pygmaea</i>	×				22
<i>Cythere</i>		×	×	Marine-brackish (3, 7); marine (12, 23).	3, 7, 12, 23
<i>C. cornuta</i>			×	Shallow sea.	18
<i>C. crispata</i>		×	×		7
<i>C. drupacea</i>			×	Shallow water.	6
<i>C. limicola</i>			×		19
<i>C. retirugata</i>		×	×		22
<i>C. transiens</i>		×	×		22
<i>C. tuberculata</i>			×		19
<i>C. visceralis</i>			×		22
<i>Cythercis</i>	×	×	×		16
<i>C. convexa</i> var. <i>sarmatica</i>		×			13, 24
<i>C. ornaticissima</i>			×	Shallow sea.	18
<i>C. serpentina</i>			×		22
<i>Cytherella</i>			×	Typical marine.	17
<i>C. muensteri</i>			×	Shallow sea.	18

LIST OF POST-PALEOZOIC FOSSIL OSTRACODES FOR WHICH A DEFINITE SALINITY HABITAT HAS BEEN INFERRED—*Continued*

Ostracode	Type of Water			Remarks	Reference
	Fresh	Brackish	Marine		
<i>Cytherelloidea williamsoniana</i>			×	Shallow sea.	6
<i>Cytheridea</i>		×	×	Shallow marine, estuarine.	3, 7, 12, 14
<i>C. calyptroides</i>			×		22
<i>C. eusarca</i>		×	×		22
<i>C. helvetica</i>		×			14
<i>C. hungarica</i>		×			24
<i>C. longicaudata</i>			×	Shallow water.	6
<i>C. mulleri</i>		×	×	Shallow sea, temperate zone (20).	11, 20
<i>C. aff. C. mulleri</i>		×		Fresh-water influence.	9
<i>C. politula</i>			×		22
<i>C. torosa</i>		×			5
<i>C. torosa</i> var. <i>litoralis</i>		×			13
<i>C. williamsoniana</i>		×	×		14
<i>Cytheridiscus</i>			×	Typical marine.	17
<i>C. unicornis</i>	×	×		Fresh or slightly brackish.	11
<i>C. unisulcata</i>	×	×		Fresh or slightly brackish.	11
<i>Cytheropteron</i>		×	×	Marine-brackish (3); typical marine (17).	3, 17
<i>C. sp.</i>		×		Marine or estuarine.	22
<i>C. elongata-concentricum</i>			×	Shallow water.	6
<i>C. virginicum</i>			×	Shallow sea, temperate zone.	20
<i>Cytherura</i>		×	×		16
<i>Darwinula leguminella</i>	×				1
<i>D. liassica</i>	×	×		Either fresh or brackish.	12
<i>Eocytherura</i>			×		17
<i>Herpetocypris aequalis</i>	×				7
<i>Krithe</i>			×	Shallow marine or estuarine.	7, 24
<i>Limnocythere zindorfi</i>	×	×			14
<i>Loxococoncha elliptica</i>		×			5
<i>Macrocypris horatiana</i>			×		22
<i>M. simplex</i>			×	Shallow water.	6
<i>Macrodentina</i>		×	×		10
<i>Nesidea</i>			×	Typical marine.	17
<i>Orthonotacythere</i>			×		15
<i>Paracypris</i>			×	Typical marine.	17
<i>Paracythere</i>			×	Typical marine.	17
<i>Pseudocythere</i>			×	Typical marine.	17
<i>Rhinocypris scabra</i> var. <i>hamata</i>	×				22
<i>Scabriculocypris acanthoides</i>	×				22
<i>S. cerastes</i>	×				22
<i>S. trapezoides</i>	×				22
<i>Schlerochylus</i>			×	Shallow lagoon, approaching littoral.	24
<i>Thaumatocypris bettenstaedti</i>			×	Up to 200 meters deep.	2
<i>T. feifeli</i>			×	Shallow water.	2

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BOTANY.—Peter Wilhelm Lund's pequi tree at Lagoa Santa and pilgrimages to his cemetery.¹ ANNA E. JENKINS, U. S. Department of Agriculture, A. A. BRITANCOURT, Instituto Biologico, São Paulo, K. SILBERSCHMIDT, Instituto Biologico, and W. ANDREW ARCHER, U. S. Department of Agriculture.²

"Trees by their very nature are landmarks and memorials. They are therefore identified with human happenings. Also, trees, having more than the allotted span of

man, carry their associations through generations of men and women. Thus they often figure not only in biography but also in

¹ Among the desiderata we assembled mostly in 1941 for the preparation of this article is a letter (Dec. 6, 1941) from James A. G. Rehn, corresponding secretary of the Academy of Natural Sciences of Philadelphia, in which he wrote as follows: "I have your letter of the 3rd about Peter Lund, whose name of course was reasonably familiar to me on account of his work on the fossil deposits at Lagoa Santa. He was elected a Correspondent of our Academy January 29, 1850, and our records give his death as having occurred May 25, 1880. Correspondents of the Academy are elected from scientists non-residents of Philadelphia, who have achieved outstanding distinction in work in the natural sciences. A very considerable part of all the great workers in our field in the last century and a quarter were Correspondents of the Academy, although the number in this class at any one time is naturally limited, and rarely has ex-

ceeded 150." This article therefore commemorates the centenary of Dr. Lund's election as a Corresponding Member of the Academy of Natural Sciences of Philadelphia.

We are indebted to Dr. Elisabeth Deichmann, Museum of Comparative Zoology, Harvard University, for a critical reading of the manuscript.

Miss Deichmann's mother was P. W. Lund's grand-niece. She was 11 years old when he died, but her whole childhood was flavored by stories about this distant uncle who kept up the contact with his family in Denmark until his death.

² In 1935-36 the first writer was on a mycological mission to Brazil, at the invitation of the government of the State of São Paulo, and was working cooperatively with the second writer at the Instituto Biologico. The fourth writer was completing a plant exploration mission to South America.